

The image features a silver laptop in the foreground, angled towards the right. Its screen displays a photograph of a wind farm with several white turbines against a blue sky with scattered clouds. The background of the entire image is a larger, slightly blurred version of the same wind farm scene, creating a sense of depth and digital connectivity. The text 'Notebook Software Application Manual' is positioned in the lower-left area, overlaid on the white surface the laptop sits on.

Notebook Software Application Manual

❖ Copyright Notice

The material in this document is the intellectual property of MICRO-STAR INTERNATIONAL. We take every care in the preparation of this document, but no guarantee is given as to the correctness of its contents. Our products are under continual improvement and we reserve the right to make changes without notice.

❖ Trademarks

- All trademarks are the property of their respective owners.
- SRS Premium Sound, SRS and the symbol are trademarks of SRS Labs, Inc.
- THX and THX TruStudio Pro are trademarks of THX Ltd. which may be registered in some jurisdictions. All rights reserved.

❖ Technical Support

If a problem arises with your system and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Alternatively, you may contact our technical staff for further guidance at: <http://support.msi.com/>

❖ Revision History

Version	Revision History	Date
2.1	For Windows 8 and later only	10, 2013

❖ About This Manual

This Software Application Manual provides instructions and illustrations on installing and using the software applications which are exclusively designed by MSI. This manual will give users more on how your notebook can be more efficient, convenient, and enjoyable with the help of these software applications.

The software applications selected here may be optionally supported for particular models. Contact the local dealer for further information if necessary.

SCM (System Control Manager)

SCM (System Control Manager) is a proprietary software for driving and controlling the Fn keys on the keyboard. The SCM is pre-installed with the default Win 8 OS and will run automatically in background.

Dragoon Gaming Center

Dragoon Gaming Center (DGC) is a handy application for integration of games installed and gaming software interface. Providing easy access to real-time system performance monitor and gaming environment setting, DGC empowers users to facilitate tweaking process without occupying system resources.

Keyboard LED Manager (KLM)

For the gaming notebook equipped with colorful keyboard LEDs, users control the color variation of the LEDs underneath the keyboard by using the Keyboard LED Manager (KLM) application. These colorful keyboard LEDs are designed to give users more visual entertainment while using the gaming notebook.

Battery Calibration

This application helps to extend the life cycle of the battery. It automatically refreshes the battery capacity through efficient processes of charging, discharging and recharging the battery.

Sizing Options

This application helps to adjust the system DPI setting conveniently. Only with the resolution (2880 x 1620) can provide the respective image including 100%, 125%, 150% (the best option), 175% and 200% DPI.

Recovery Image Backup Tool

Recovery Image Backup Tool, the utility designed to backup the recovery image to blank DVD disks, a USB flash disk or ISO files. They can be used to recover the system to manufacturer's default settings when it is needed.

This utility applies to the Operating System of Windows 8 and later only. Usage of this application on any product with no authorization may be prohibited.

Note

❖ SCM (System Control Manager)

SCM (System Control Manager) is a software for driving and controlling the Fn keys on the keyboard. The SCM is pre-installed with the default OS and will run automatically in background. If you intend to install your own version of OS, it is required to install SCM to enable the Fn keys.

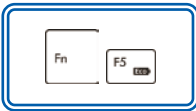


■ Quick Launch [Fn] Keys

Use the Quick Launch [Fn] buttons on the keyboard to activate the specific applications and tools. With the help of these quick launch buttons, users will be able to do work more efficiently.

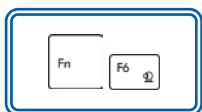
F5: ECO Engine (Power Saving) Function

ECO Engine, the outstanding and unique power saving function, provides various power saving modes – Movie mode, Presentation mode, Game mode, and Office mode, to extend the battery running time while performing different tasks with this notebook.



Movie Mode	Select this mode when playing multimedia applications.
Presentation Mode	Select this mode when performing presentation applications.
Game Mode	Select this mode when performing game applications.
Office Mode	Select this mode when dealing with office documentation tasks.
ECO Off	Select to disable ECO Engine.

F6: Webcam

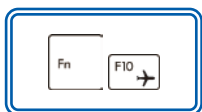


ON



OFF

F10: Airplane Mode



ON



OFF

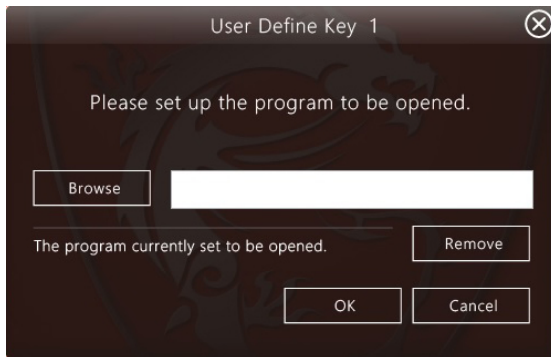
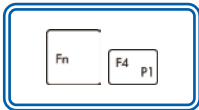
■ User Define key

This function allows users to define the **P1** quick launch button for launching the particular application. Once the shortcut has been created properly, users will be able to launch the selected program, application, utility, or path by pressing the **P1** Fn key on the keyboard.

Note: This function will not be available when **Dragoon Gaming Center** is installed.
To restore this function, uninstalling Dragoon Gaming Center is necessarily required.

- To define the **P1** quick launch button, move the cursor to the **[SCM]** icon on the lower right side of the display, and the right click the mouse to select **P1 Setting** to bring out the Use Defined Key settings dialogue.
- Click the **Browse** button to setup the shortcut to an appointed program, application, utility, or path, and then click OK to have this selection take effect.
- Click the **Remove** button to delete the previous shortcut made.

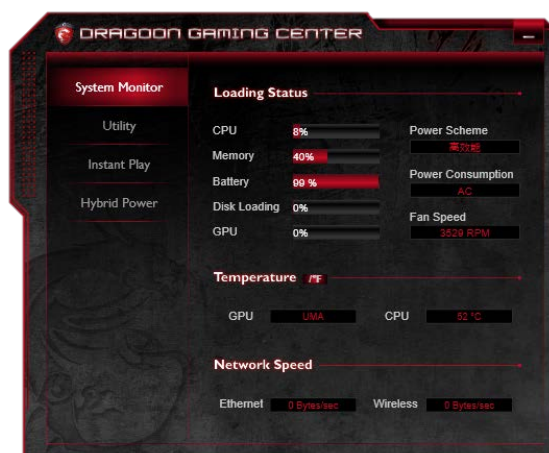
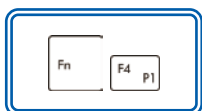
F4: P1 Setting



■ Dragoon Gaming Center (optionally supported)

When the application of Dragoon Gaming Center is installed, activate Dragoon Gaming Center with Quick Launch **P1** Fn key.

F4: Dragoon Gaming Center



■ System Control Manager interface

Besides using the [Fn] buttons on the keyboard to activate the specific applications and tools, users may also achieve the same results via the System Control Manager interface.

Double right click on the **SCM** icon on the lower right corner of the display to bring up the System Control Manager interface as shown below.



1. **Devices ON/ OFF**

Right click the mouse on the device icon to switch the selected device on or off recurrently.

2. **Brightness Level**

Right click the mouse on the Left/ Right arrow to turn the display brightness level up and down.

Volume Level

Right click the mouse on the Left/ Right arrow to turn the speaker volume level up and down.

3. **ECO Engine (Power Saving) Function**

Select a proper power saving function by right clicking on the icons.

4. **Display ON/ OFF**

Right click the mouse on the icon to switch off the display. To switch on the display, hit any key on the mouse or keyboard.

5. **ODD Eject (optionally supported)**

Right click the mouse on the icon to eject the ODD. (If there is multiple ODD on the notebook, this function will eject the first ODD by ASCII order.)

Note

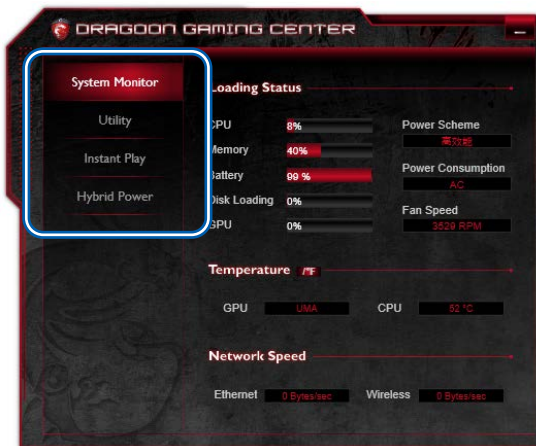
❖ Dragoon Gaming Center

Launching Dragoon Gaming Center

When the Dragoon Gaming Center application has been installed successfully, the Dragoon Gaming Center launching icon will appear under Programs and the system tray in the lower right-hand corner of screen. Click on this icon to launch the Dragoon Gaming Center application.



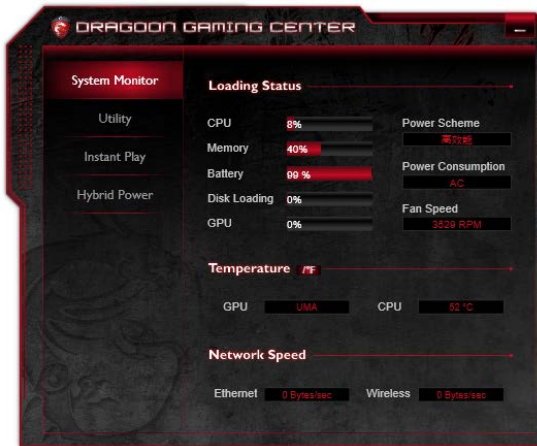
Main Window



1. **System Monitor:** This item shows current system loading information.
2. **Utility:** Default has included some pre-installed software shortcuts.
3. **Instant Play:** This item includes settings regarding gaming mode environment.
4. **Hybrid Power** (optionally supported): This item indicates whether Hybrid Power status is ON or OFF.

System Monitor

The field shows real-time readings of major components including CPU/ GPU, memory, temperature and network speed.



Loading Status

This item shows current status of CPU, memory, battery capacities, disk I/O loading, GPU, current power scheme, power consumption while AC power is unplugged, and fan speed.

Temperature

This item shows GPU and CPU temperature. Click on 'F' can switch to Fahrenheit degree while click on 'C' to Celsius degree.

Network Speed

This item shows Ethernet and Wireless speed.

Utility

This function integrates a maximum of nine shortcuts of software and utilities embedded in the notebook.



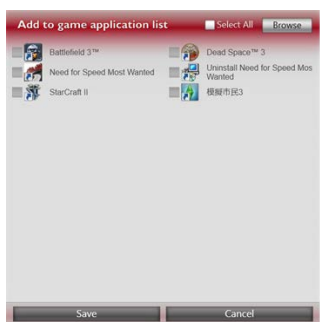
InstantPlay

InstantPlay function allows users to define several features in one P1 key shortcut. Users will be surprised by what a P1 key or a combination of Fn+F4 key is capable of! One can designate an immediate startup on one specified game in P1 key shortcut, and set P1 key as a quick switch to ECO Gaming mode and adjust hardware configuration.



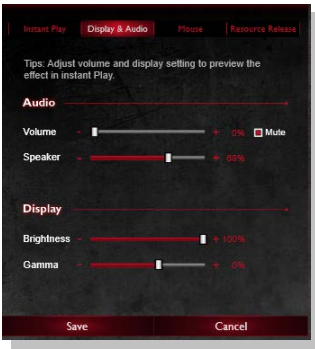
InstantPlay

This item gives an easy and quick management of installed game database. Users can add or remove shortcuts of your computer games.



Display & Audio

This item is meant for audio and display adjustments.



Mouse

This item adjusts settings include:

- Point Speed
- Speed
- Scrolling



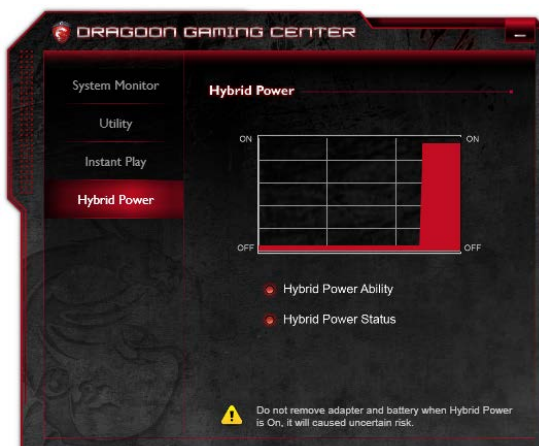
Resource Release

This item allows users check unnecessary applications in EndTask List to avoid influencing gaming performance.



Hybrid Power (optionally supported)

This function empowers users to monitor current Hybrid Power status.



Hybrid Power Status Chart

This item indicates the duration of the Hybrid Power mode the system has entered in the last 60 seconds.

Hybrid Power Ability

Hybrid Power shows current status of Hybrid Power mode and the function is only available in selected models. The selection will not be displayed in the following conditions: the model purchased does not support Hybrid Power, an unplugged AC power or a battery capacity that is lower than 30%.

Hybrid Power Status

This item indicates whether Hybrid Power status is ON or OFF.

Note: Hybrid Power is only available in selected models.

Note

❖ Keyboard LED Manager (KLM)

Launching the Keyboard LED Manager

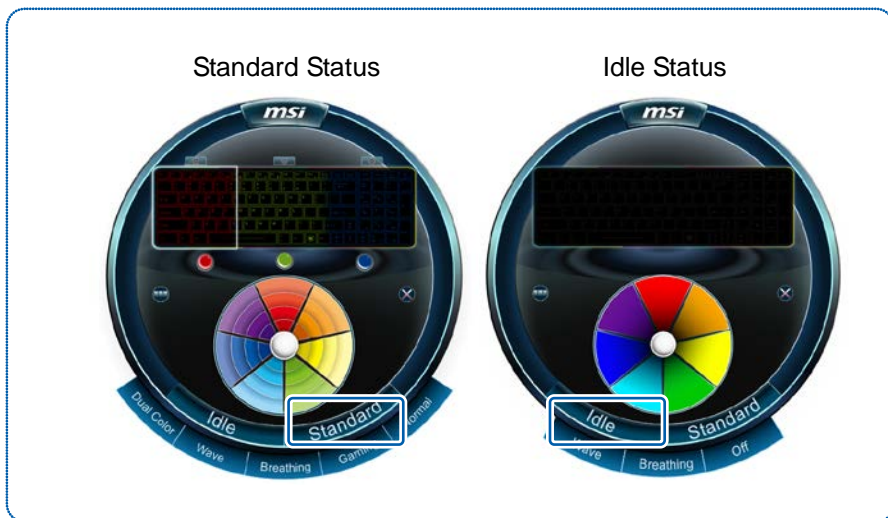
When the KLM application has been installed successfully, the KLM launching icon will appear under Programs and the system tray in the lower right-hand corner of screen. Click on this icon to launch the Keyboard LED Manager application.



Standard Status and Idle Status

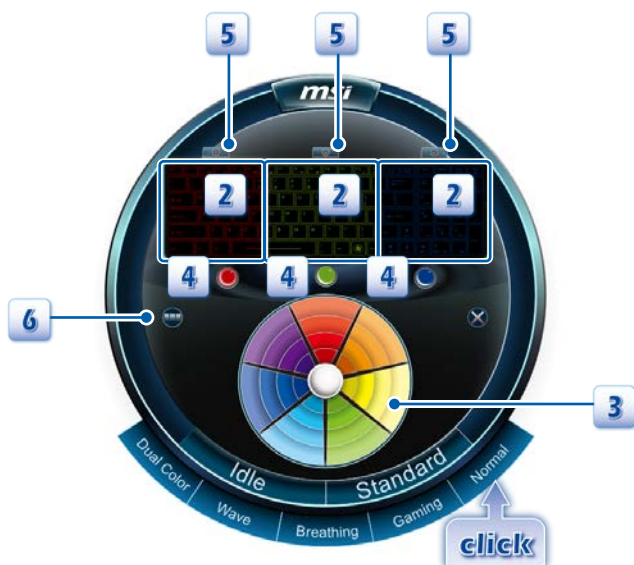
KLM allows users to set different LED flashing modes under Standard status and Idle status.

- When a desired LED Flashing Mode is selected under [**Standard**] status, the selection will take effect while the system is still on.
- When a desired LED Flashing Mode is selected under [**Idle**] status, the selection will take effect while the system is in Sleep mode.



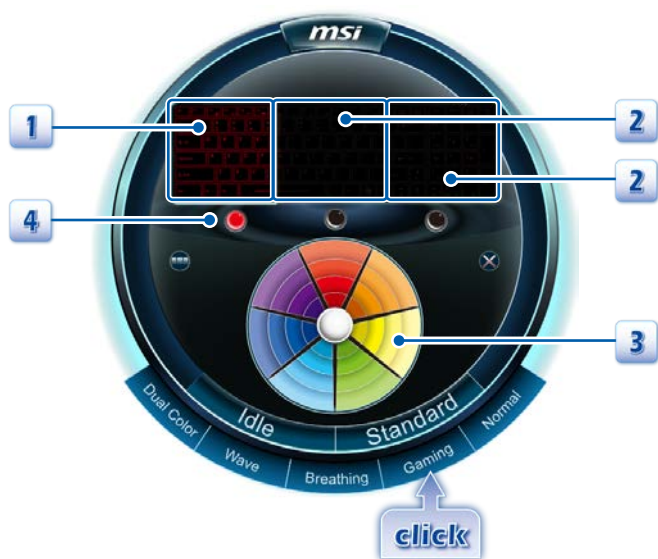
Selecting the LED Flashing Mode under Standard Status

- Click on [**Standard**].
- Select a desired LED flashing mode from the option: **Dual Color**, **Wave**, **Breathing**, **Gaming**, and **Normal**.



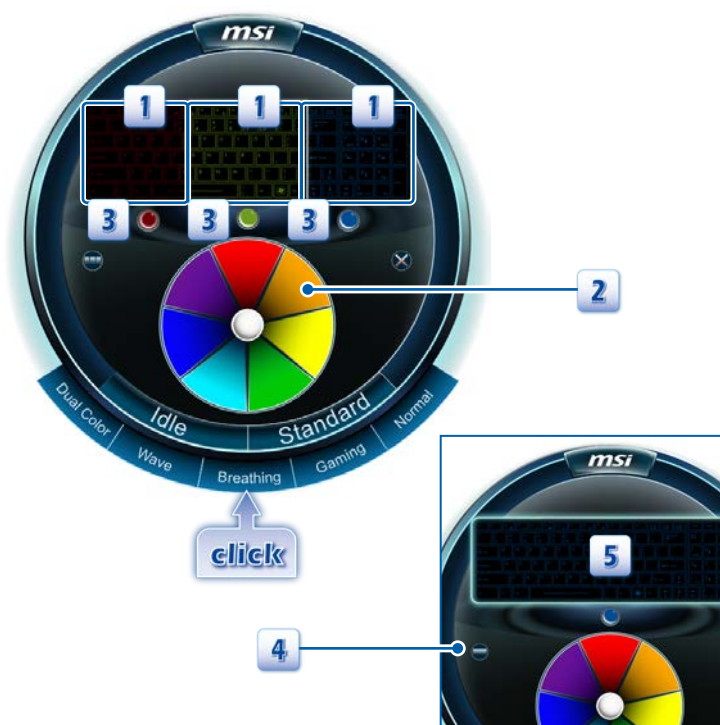
Normal Mode:

1. When this mode is selected, the keyboard LEDs will always stay lit with the selected color.
2. Select an LED section (A, B, or C) by clicking on the corresponding area on the diagram.
3. Select a desired LED color for each LED section by clicking on the color wheel.
4. The selected color for each LED section will be shown in the LED Color Indicators below the keyboard diagram.
5. To turn off the LEDs of a particular LED section, simply click on the LED switch above each LED section.
6. To group all three LED sections into one main section, click [**Lock Keyboard**] on the left hand side. Then only one LED color can be selected for the keyboard LEDs.



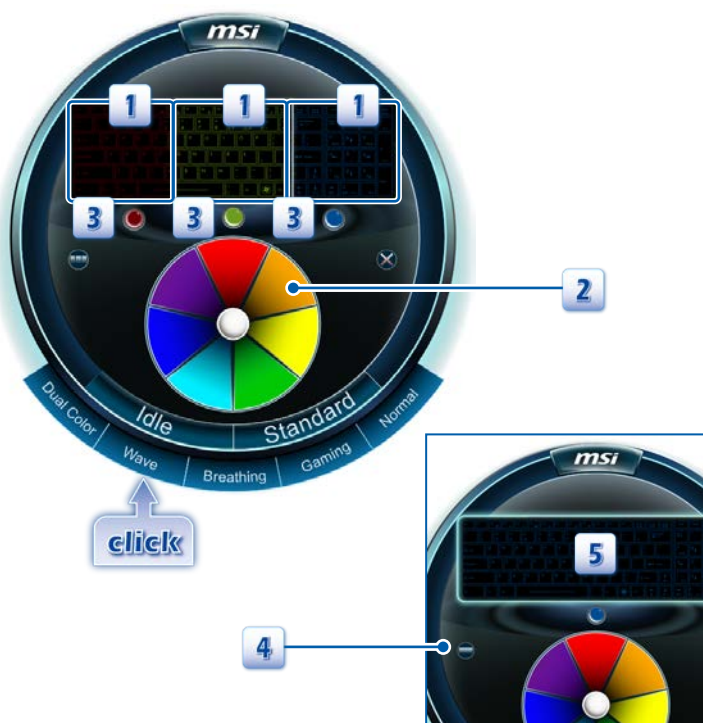
Gaming Mode:

1. The keyboard LEDs of Section-A will always be lit to show the selected color.
2. The keyboard LEDs of Section-B and Section-C will always be disabled when Gaming mode is selected.
3. Select a desired LED color by clicking on the color wheel.
4. The selected color will be shown in the LED Color Indicator for Section-A



Breathing Mode:

1. The keyboard LEDs of each section will be individually lit with the selected LED color and then darkened with a steady rhythm.
2. Select a desired LED color for each LED section by clicking on the color wheel.
3. The selected color for each LED section will be shown in the LED Color Indicators located below the keyboard diagram.
4. To group the three LED sections into one main section, click [**Lock Keyboard**] on the left hand side.
5. Now only a single LED color can be selected for the keyboard LEDs.



Wave Mode:

1. The keyboard LEDs of Section A, B, and C will be lit with the selected LED color in order from LED Section-C to Section-B to Section-A, and then the LEDs will darken with a steady rhythm.
2. Select a desired LED color for each LED section by clicking on the color wheel.
3. The selected color for each LED section will be shown in the LED Color Indicators located below the keyboard diagram.
4. To group the three LED sections into one main section, click [**Lock Keyboard**]
5. Only a single LED color can be selected for the keyboard LEDs.



Dual Color Mode:

1. When Dual Color mode is selected, the keyboard LEDs will be grouped into one main section, and the keyboard LEDs will be lit with the two selected colors.
2. Select two LED colors at a time by clicking on the color wheel.
3. The two selected colors will be shown on the LED Color Indicator.

Selecting the LED Flashing Mode under Idle Status

Select a desired LED Flashing Mode in Idle status. The selection will take effect while the system is in Sleep mode.

- Click on [**Idle**],
- Select a desired LED flashing mode from **Wave**, **Breathing**, and **Off**.



Off Mode: Turn off the Keyboard LED function.

Breathing Mode:

1. The keyboard LEDs of each section will be individually lit with the selected LED color in order and then darkened with a steady rhythm.
2. Select a desired LED color for each LED section by clicking on the color wheel, and the selected color for each LED section will be shown in the LED Color Indicators located below the keyboard diagram.
3. To group the three LED sections into one main section, click [**Lock Keyboard**] so that only one LED color can be selected for the keyboard LEDs.

Wave Mode:

1. The keyboard LEDs of each section will be lit with the selected LED color in order from LED Section-C to Section-B, and to Section-A, and then dimmed in an on/off pattern.
2. Select a desired LED color for each LED section by clicking on the color wheel.
3. To group the three LED sections into one main section, click [**Lock Keyboard**], so that only one LED color can be selected for the keyboard LEDs.

Adjusting the RGB Color level of LEDs

The RGB Color level of the keyboard LEDs is adjustable.

- Make sure the KLM console is closed.
- Use the following buttons to adjust the shades of color of the LEDs.



Increase LEDs' RGB saturation level.



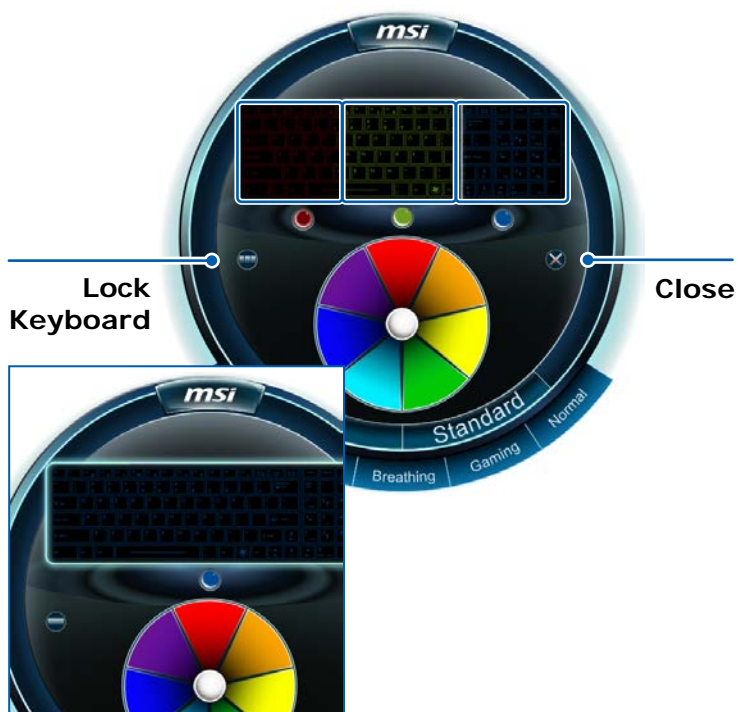
Decrease LEDs' RGB saturation level.

Grouping the LED sections

The divided LED sections can be grouped into one main section by clicking on the [**Lock Keyboard**] icon. Once the three LED sections are grouped, only one color can be selected to be illuminated. **Note:** Grouping function will not take effect in Gaming mode.

Closing the KLM interface

To close the KLM interface, simply click on the [**Close**] icon.



Note

❖ Battery Calibration

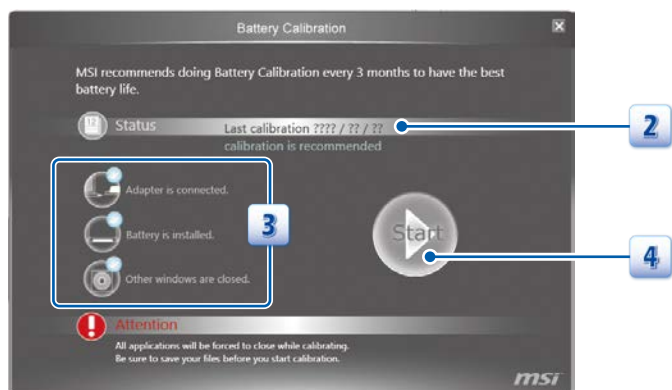
Activating the Battery Calibration

When the Battery Calibration application has been installed successfully, the Battery Calibration launch icon will appear in the MSI folder of the Start menu. Click on this icon to launch the Battery Calibration application.



Starting the Battery Calibration Process

1. Left click on the Battery Calibration launch icon in the MSI folder of the Start menu, and the Battery Calibration main display will appear.
2. If you are using the Battery Calibration process for the very first time, there will be no date information for the last calibration shown on the Stats field.
3. Before starting the Battery Calibration process, make sure that the following conditions are met:
 - a. The AC/DC adapter is connected.
 - b. The battery is installed properly.
 - c. No no other application is activated.
4. Left click on the "Start" icon to start the Battery Calibration process.



- The calibration process status will be shown on the display telling users that the system is now charging, recharging, or discharging.



- Calibration completed.



Note: MSI recommends doing Battery Calibration every 3 months to have the best battery life.

Warning Notification

1. If the AC/DC adapter is disconnected during the calibration process, a warning notification will appear.
2. Please reconnect the AC/DC adapter to continue the calibration process within 15 seconds; otherwise the calibration process will stop automatically.

1



1. If the battery of the notebook is not installed properly or removed during the calibration process, the warning notification will appear.
2. Please double check that the battery is installed properly, and then press the Try Again button to continue the calibration process.

2



Note

❖ Sizing Options (Only available in selected models)

Activating the Sizing Options

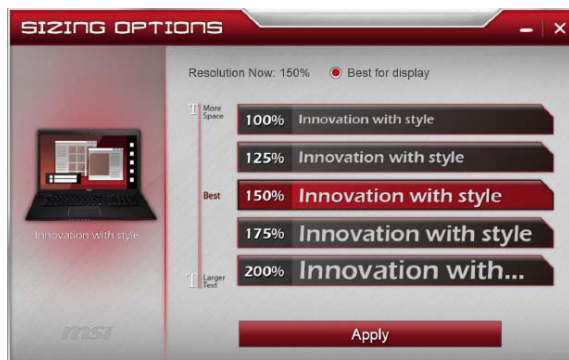
When the Sizing Options application has been installed successfully, the Sizing Options launch icon will appear in the MSI folder of the Start menu and the system tray in the lower right-hand corner of screen.



1. Left click on **Sizing Options** shortcut icon on the desktop or the icon in the lower right-hand corner of the screen to launch the Sizing Options application.
2. Left click on the **Sizing Options** launch icon of the Start menu to launch the Sizing Options application.

Main Window

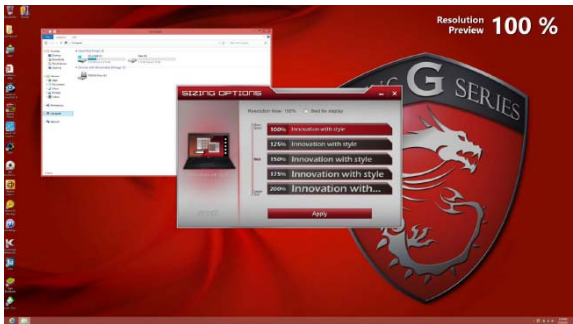
Sizing Options has 5 adjustable DPI buttons in the main window: 100%, 125%, 150%, 175% and 200% DPI. **150% DPI** is the default and the optimum setting for resolution 2880 x 1620 (3K panel). There will no preview image if the resolution is not 2880 x 1620 (3K panel).



5 Preview Windows

When select one DPI setting will bring the following respective preview image:

1

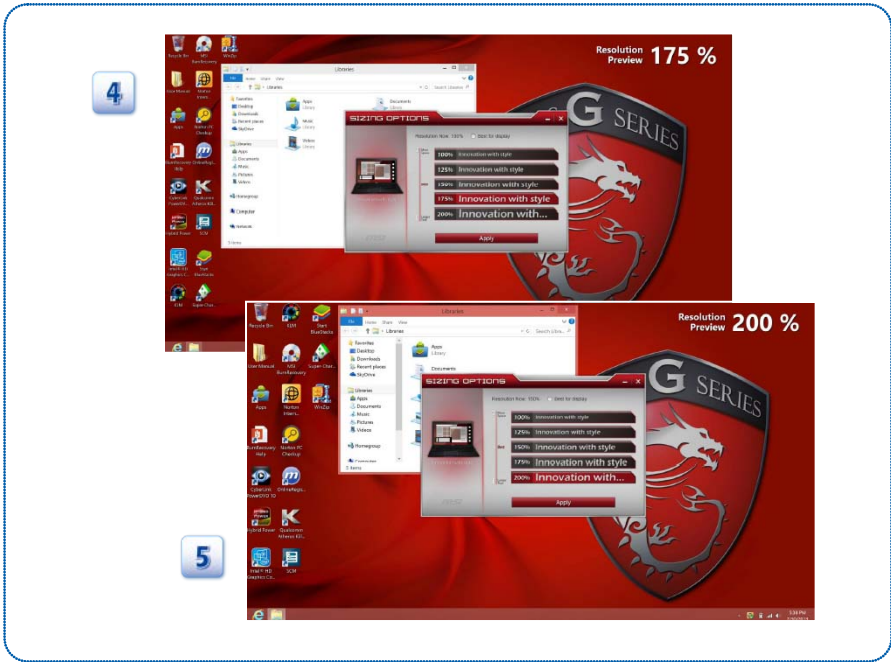


2

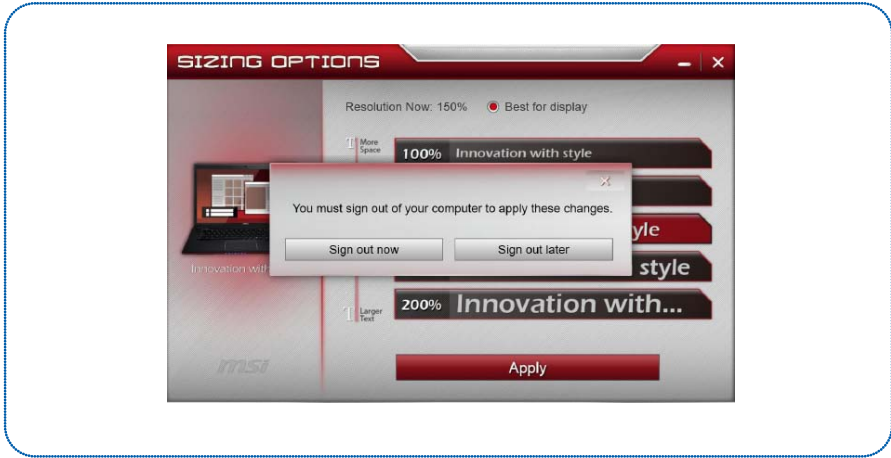


3





When change the DPI setting will bring one dialogue and ask you to sign out of the computer to apply these changes, or you can choose to sign out later. Only select “Sign out now” and restart your computer, the updated DPI setting will take effect.

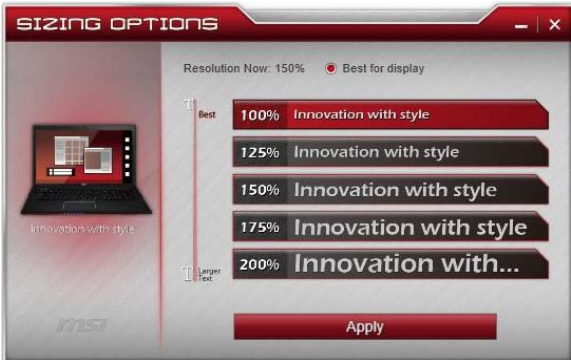


Best DPI for the Display

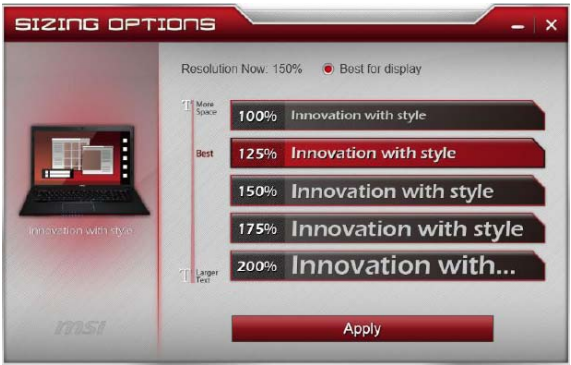
We recommend you to apply the following DPI settings to get the best DPI for the display.

Resolution	Best DPI
Resolution<1920X1080	100%
1920X1080 <= Resolution<2880 x 1620	125%
2880 x 1620 (3K panel)	150%

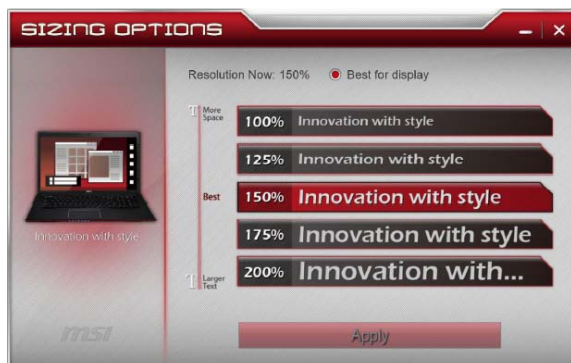
100%



125%



150%



Note

❖ Recovery Image Backup Tool

Recovery Image Backup Tool, the utility designed to backup the recovery image to blank DVD disks, a USB flash disk or ISO files. They can be used to recover the system to manufacturer's default settings when it is needed.

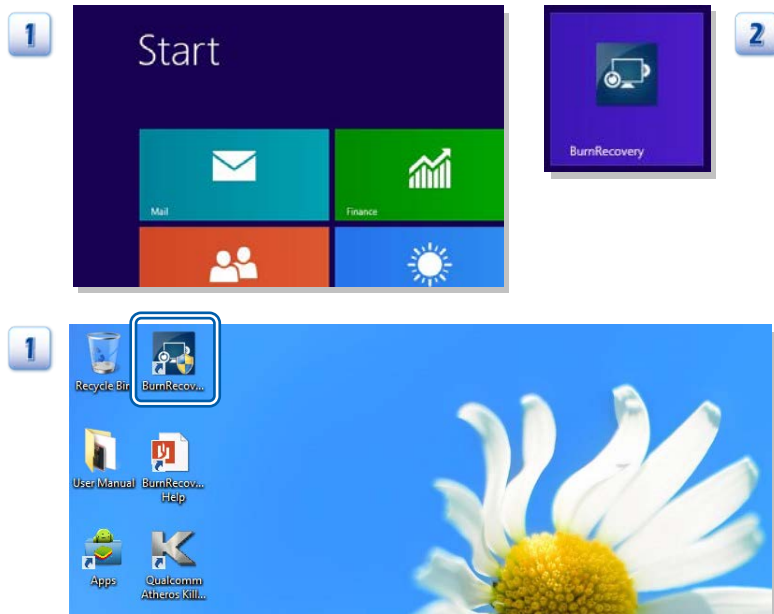
This utility applies to the Operating System of Windows 8 or later only. Usage of this application on any product with no authorization may be prohibited.



Note: For more detailed information about using Recovery Image Backup Tool, please refer to the User's Manual of System Recovery.

Activating the Utility

1. Find the shortcut of BurnRecovery on the Start Screen or Windows desktop.
2. Double click on the shortcut to activate the Recovery Image Backup Tool.
3. Main Selection page of the Recovery Image Backup Tool.



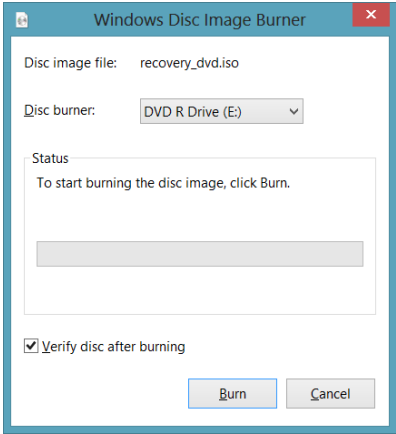


Create and Burn a Recovery Disk

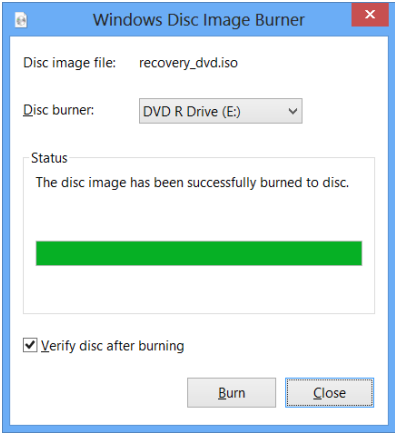
1. To create and burn a Recovery Disk, select **[Recovery Disk]**, and then follow the on-screen instructions to continue.
2. Prepare the number of the writable disk as requested.
3. Place the disk into the optical drive device, and then select **[Burn]**.
4. Note: Closing the other applications while burning the recovery disk is suggested.
5. Click **[Close]** when a disk is successfully created.
6. Click **[Next]** to continue the procedure of creating and burning recovery disks.
7. Exchange and place the rest disks into the optical drive device as instructed.
8. All recovery disks created and burned successfully.



3



4



5



6

Restore your
system back to
default settings



Recovery Image Backup Tool



Completed NO.2 disc

The number 2 recovery disc has been successfully created. Please remove the disc and insert the number 3 blank writable DVD disc to proceed the next step

Please click (next) to continue

Close

Next

7

Restore your
system back to
default settings



Recovery Image Backup Tool



Finish

The 3 of 3 recovery disc has been successfully created. Please remove the disc and store it properly.

Discs required 3
Discs created 3

Please click (next) to continue

Close

Next

7

Restore your
system back to
default settings



Recovery Image Backup Tool



Finish

The recovery disc creation has been completed.

☒ Do you want to remove the temporary files?

Finish

Recovering the System

When the hard drive and system encountered non-recoverable problems, it is always recommended to perform the System Recovery Function with F3 Hotkey first.

If the system is unable to recover to the manufactory default settings with F3 Hotkey, follow the instructions below to proceed the recovery function with the DVD recovery disks or USB flash drive.

1. Insert the DVD recovery disks to your computer.
2. Restart the computer.
3. Press the **[F11]** hotkey on the keyboard while the computer is re-booting.
4. Select to boot from **[DVD Recovery disk]**, and press **[Enter]** to confirm the selection, and then follow the on-screen instructions to continue.
5. The main page of Recovery System appears.



6. Select **[Hard Disk Recovery]** to restore the hard disk to the manufactory default settings.
7. Select **[System Partition Recovery]** to reset the hard disk drive partition where the operating system installed to the manufactory default settings.

6

Recovery System



Hard Disk Recovery

System Partition Recovery

Exit

The whole hard disk will be formatted. All the data will be defragmented and restored to factory default settings.

7

Recovery System



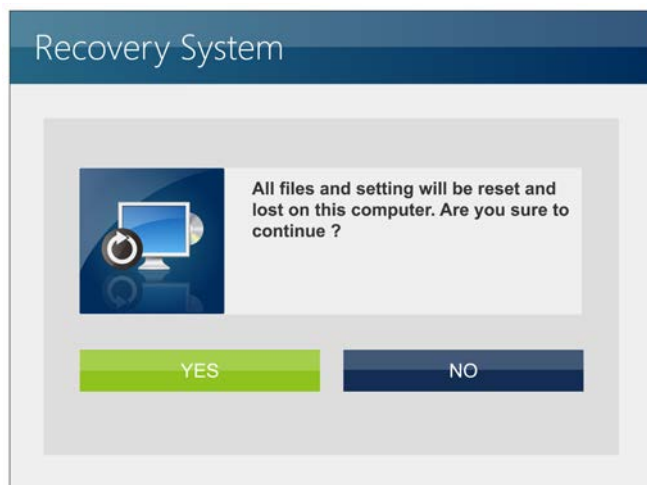
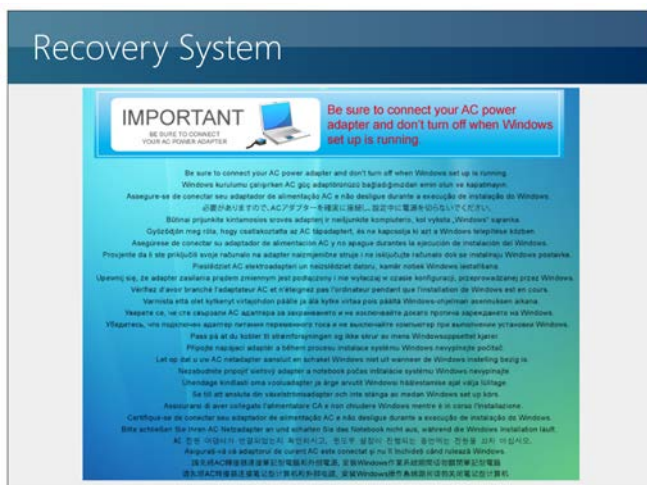
Hard Disk Recovery

System Partition Recovery

Exit

Only OS_Install drive will be formatted.
Other drives will not be affected.
OS_Install drive will be restored to factory default settings.

8. AC power is required while proceeding the System Recovery Function. Assure that the AC power is connected to the notebook before moving forward to the next step.
9. The system recovery process will format the hard disk drive; make sure that the important data has been backed up before continuing the process.



10. Follow the on-screen instructions to continue.



Note